REMARKS

The non-final Office Action dated August 25, 2008 rejected claims 1 and 3, and objected to claims 2 and 4-7. After entry of the present amendment, claims 1-7 remain pending. The present amendment amends independent claim 3 to clarify that the digital stored program control switch that implements a test method "includes a back process module, a front call control process module and a hardware subsystem for performing a call test". Applicants respectfully request reconsideration of the application in view of the accompanying amendments and remarks.

Claim Rejections Under 35 U.S.C. § 102

In the non-final Office Action, independent claims 1 and 3 were rejected under 35 U.S.C. § 102(b) as being anticipated by Aoyama, U.S. Patent No. 5,838,767 (hereinafter, "*Aoyama*"). Since *Aoyama* does not disclose or suggest each and every element of the Applicants' claimed inventions of claim 1 and amended claim 3, the Applicants respectively argue that these claims are patentably distinguishable from the cited reference.

Claim 1:

Claim 1 of the present application provides a simulated user call test system built in a digital stored program control switch, and all the test functions in the process of simulating user call are performed by the simulated user call test system built in a digital stored program control switch. The element: "a simulated user call test system built in a digital stored program control switch" is not found in *Aoyama*. Also missing from *Aoyama* are at least the following elements: "back process module", "hardware subsystem", and "front call control process module" *Aoyama* pertains to "a method for simulative testing of a stored program control type electronic automatic exchange, wherein speech path equipment (switch, trunk, tone generator, signal transmitting and receiving device, testing device, subscriber's circuit) of the electronic automatic exchange is simulated so as to test software installed in the electronic automatic exchange. (Col. 1, lines 5-13, emphasis added). Furthermore, "An electronic automatic exchange 401 without speech path equipment is intended to test software 403 provided in the electronic automatic exchange 401."

(Col. 1 lines 41-44. emphasis added) Furthermore, "The simulation system 405 is operated in the workstation 404." (Col. 1 lines 57-58). Therefore, in *Aoyama*, the switch, trunk, etc. are simulated so as to test software installed in the electronic automatic exchange. Further evidence exists in at least col. 5, lines 8-48 and col. 3, lines 18-35 that system of *Aoyama* only simulates hardware processes by reading internal data information, including classes and address information, and the workstation provides the flow of character string data transmitting process. Therefore, the method and system provided by *Aoyama* requires the workstation to complete the simulation of testing.

In contrast, the Applicants' claim 1 relates to a test call system built into a digital stored program control switch to provide various testing processes which include the hardware subsystem. Therefore, the simulated test processes of the user call are completed in the digital stored program control switch. While *Aoyama* may facilitate certain testing of a telecommunications signals and responses by way of software within the workstation, the speech path is simulated within the workstation, and is therefore not tested in actual hardware. Therefore the tests performed by the hardware subsystem: "picking-up or hanging-up phones, detecting signaling tone, dialing, sending a test tone, or talking" in Applicants' claim 1 is not realizable in *Aoyama*. (*See* Paragraphs [0049] – [0059] of Applicants' Specification).

In response to the Office Action assertion that *Aoyama* discloses a hardware subsystem in Col. 1 lines 42-52, the cited portions of *Aoyama* make no reference to such elements, but in fact, recite "An electronic automatic exchange 401 without speech path equipment is intended to test software". (Emphasis added). Furthermore, in response to the Office Action assertion that *Aoyama* discloses a back process module that performs statistical processes in Col. 1 line 53 – Col. 2 line 13, the cited portions of *Aoyama* make no reference to such elements, but rather, refers to the "CRT outputting unit 409 to graphically display the result of the simulation on the CRT 406 of the workstation 404." (Emphasis added). Displaying results of a test on a screen does not imply that statistical processes are performed. (See Paragraph [0108] of Applicant's Specification). For at least these reasons, *Aoyama* does not disclose or suggest each and every element of Applicants' claim 1, and therefore, claim 1 should be allowed over the cited reference.

Furthermore, the technical solutions provided in at least claim 1, and defined the Applicants' specification, are different from the technical solutions disclosed by *Aoyama*. As noted in the analysis presented above, the Applicants' technical solutions have at least the following distinguishing technical features with respect to *Aoyama*:

a) the simulated user call test system is built in a digital stored program control switch to simulate a user call process. Whereas, *Aoyama* provides that the simulation system operated in the workstation simulates speech path equipment (switch, trunk, tone generator, signal transmitting and receiving device, test device, subscriber's circuit) of the electronic automatic exchange so as to test software installed in the electronic automatic exchange, but not the simulated user call test system built in a digital stored program control switch to simulate the user call process.

b) The simulated user call test system comprises a back process module, a front call control process module and a hardware subsystem for performing a call test; however, in *Aoyama*, the simulation system includes a electronic automatic exchange 401 and a workstation 404, and the electronic automatic exchange 401 does not have speech path equipment (switch, trunk, tone generator, signal transmitting and receiving device, test device, subscriber's circuit) at all.

c) The back process module runs on a maintaining platform of the switch for providing an operation interface for a user to perform a call test setup, receives call test result data transmitted by the front call control process module, and performs display and statistic process; however, the simulation system provided in *Aoyama* does not possess speech path equipment, which is simulated by the simulation system operated in the workstation so as to test software installed in the electronic exchange.

d) The front call control process module is included in a main control module of the switch to receive call test setup parameters provided by the back process module, control the hardware subsystem to perform a call test process according to a flowchart and user parameters set, and report a result of the call test to the back process module; however, the simulation system provided in *Aoyama* does not possess speech path equipment, which is simulated by the simulation system operated in the workstation so as to test software installed in the electronic exchange.

e) The hardware subsystem comprises function process units of the digital stored program control switch to receive instructions from the front call control process module, perform tests comprising at least one of the following: picking-up or hanging-up phones, detecting signaling tone, dialing, sending a test tone, or talking; and reporting test results to the front call control process module. However, the simulation system provided in *Aoyama* does not possess speech path equipment, which is simulated by the simulation system operated in the workstation so as to test software installed in the electronic exchange.

In the technical solutions provided in at least claim 1, all test functions in the process of simulating user call are finished by the simulated user call test system built in a digital stored program control switch. Furthermore, a test system for simulating user large traffic call built in a digital stored program control switch, which has the same function as commercial outside call testers, is realized on the basis of the original stored program control switch equipment by adding a call test process and necessary alternative hardware process modules to the switch control process software system.

The claimed invention of claim 1 can provide, in certain embodiments, the following features: (1) the system is wholly built in the switch system; users can obtain such system with less cost when buying a switch system; (2) the call test result is equal to the standard commercial call testers, and easier to use; (3) because the test system is built in a digital switch system, the simulated user call test system can be used as an on-line call test system in the switch system. Therefore, any system call function faults can be detected immediately. (Please see the content from line 25 on page 3 to line 4 on page 4 of the original specification for details).

Aoyama does not offer a technical teaching for applying the above distinguishing technical features to solve the technical problem to be solved in certain embodiments of the claimed inventions. The above distinguishing technical features are not the common technical means in the art. Therefore, the technical solutions of claim 1 would also be non-obvious. For at least these reasons, *Aoyama* does not disclose or suggest each and every element of Applicants' claim 1, and therefore, claim 1 should be allowed over the cited reference.

Claim 3:

Similarly, it can be seen that independent claim 3 is in conformity with the provisions of 35 U.S.C. § 102(b) and 35 U.S.C. § 103. Claim 3 has been amended to clarify that built-in modules of a digital stored program control switch include:" a back process module, a front call control process module and a hardware subsystem for performing a call test." *Aoyama* differs substantially from the claimed invention of amended independent claim 3. As explained above with respect to claim 1, *Aoyama* pertains to "An electronic automatic exchange 401 without speech path equipment is intended to test software 403 provided in the electronic automatic exchange 401." (Col. 1 lines 41-44. emphasis added). In contrast, Applicants' claimed invention of amended claim 3 relates to "test method implemented by one or more built-in modules of a digital stored program control switch which includes a back process module, a front call control process module and a hardware subsystem for performing a call test." The elements: "back process module", "hardware subsystem", and "front call control process module" are missing from the cited reference, and arguments with regard to these elements have already been presented above with respect to claim 1.

Furthermore, amended claim 3 includes, for example, the elements: "sending, by the front call control process module, instructions to a hardware subsystem within the switch according to a call test control flowchart set"; "completing the test process according to the instructions from the front call control process module, and reporting a test result to the front call control process module by the hardware subsystem"; "processing the call test result, and collecting to the back process module by the front call control process module"; and "displaying the result by the back process module." Again, these elements are missing from the cited reference.

Certain embodiments of the Applicants' claimed inventions can obtain one or more distinct results. For example, an embodiment of the claimed inventions can facilitate convenient on-line communication network testing, which may help to find and locate any failure in the system in time. Furthermore, such testing may obtain much more detailed statistics on reasons associated with the failures than can be obtained using the software tester of *Aoyama.*

For at least the foregoing reasons, *Aoyama* does not disclose or suggest each and every element of Applicants' amended claim 3, and therefore, amended claim 3 should be allowable over the cited reference.

Allowable Subject Matter

The Office Action admits that dependent claims 2, and 4-7 contain allowable subject matter. Since amended independent claims 1 and 3 are believed to be patentable for at least the reasons as argued above, the respective dependent claims 2, and 4-7, should also be allowed as a matter of law.

CONCLUSION

It is not believed that extensions of time or fees for addition of claims are required, beyond those that may otherwise be provided for in documents accompanying this paper. However, in the event that additional extensions of time are necessary to allow consideration of this paper, such extensions are hereby petitioned under 37 C.F.R. § 1.136(a), and any fee required therefore (including fees for net addition of claims) is hereby authorized to be charged to Deposit Account No. 19-5029.

Respectfully submitted,

Christopher J. Chan
Attorney for the Applicants
Reg. No. 44,070

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SUTHERLAND ASBILL & BRENNAN LLP
999 Peachtree Street NE
Atlanta, Georgia 30309-3996
Telephone: (404) 853-8049
Facsimile: (404) 853-8806

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